



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/154,966	09/17/1998	CHRISTOPHER HAYWOOD		7857

35114 7590 08/23/2004

ALCATEL INTERNETWORKING, INC.
ALCATEL-INTELLECTUAL PROPERTY DEPARTMENT
3400 W. PLANO PARKWAY, MS LEGL2
PLANO, TX 75075

EXAMINER

NGUYEN, STEVEN H D

ART UNIT	PAPER NUMBER
----------	--------------

2665

DATE MAILED: 08/23/2004

28

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/154,966

Applicant(s)

HAYWOOD ET AL.

Examiner

Steven HD Nguyen

Art Unit

2665

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 June 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 14-17 and 19-27 is/are pending in the application.
- 4a) Of the above claim(s) 14-17 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 25 and 26 is/are allowed.
- 6) ☒ Claim(s) 19, 22 and 27 is/are rejected.
- 7) ☒ Claim(s) 20, 21, 23 and 24 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 6/8/04 has been entered.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 19 and 27 are rejected under 35 U.S.C. 102(b) as being anticipated by Munter (USP 5499239).

Regarding claim 19, Munter discloses (Fig 7-10 and col. 36 to col. 8, lines 35, the data packet is split into the data bus for transmitting to the destination modules) a switch backplane comprising a plurality of switching controllers (Fig 7, Modules) and plurality of packet buses (Fig 7, Ref 80), each of packet buses comprising a root (Fig 7, the modules couple to each root of the packet buses), operable coupled to one of the plurality of switching controllers, for receiving data packet from the associated switching controller and a plurality of leaves for transmitting the data packet received from the root wherein the plurality of leaves are operable coupled to two or

more of the plurality of switching controllers, wherein each of the switching controllers is adapted to concurrently transmitting the data packet to every other switching controller and each of the plurality of switching controllers is adapted to concurrently receive packet data from two or more of the plurality of switching controllers (Fig 7, the module transmits and receives the packet via packet buses concurrently to/from two or more modules; See Fig 8 and col. 8, lines 11-19).

Regarding claim 27, Munter discloses (Fig 7-10 and col. 36 to col. 8, lines 35, the data packet is split into the data bus for transmitting to the destination modules) a switch backplane comprising a plurality of packet buses (Fig 7, Ref 80) and plurality of switching controllers (Fig 7, Modules) connected on the packet buses wherein each switching controllers comprising a transmitting interface packet data on one of packet buses to each of the other switching controllers and a plurality of receive interfaces for receiving data packet from two or more of the plurality of packet buses wherein the switching controllers are adapted to transmit data packet in parallel on their respective ones of the packet buses (Fig 7, each module has a transmitting interface and plurality of receiving interfaces for receiving the data packet from the other modules, See multiplexing wherein the multiplexing has a plurality of interfaces for receiving the data packets from two or more modules and demultiplexing of the modules; See Fig 8 and col. 8, lines 11-19).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

Art Unit: 2665

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over Munter in view of Scoot (USP 5953340).

Munter fails to fully disclose the claimed invention. In the same field of endeavor, Scott discloses a switch controller having a protocol domain interface for converting protocol for transmitting/receiving the data packet on the parallel packet buses (col. 7, lines 64 to col. 8, lines 42).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to apply a protocol domain as disclosed Scott into Munter. The motivation would have been to interface the different networks. Even without Scott's teaching, one of ordinary skill in the art would have been recognized a step of applying a protocol domain into Munter because it is well know and expected in the art.

Allowable Subject Matter

6. Claims 25-26 are allowed.

7. Claims 20, 21, 23-24 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

8. The following is a statement of reasons for the indication of allowable subject matter:

As claim 25, the prior arts fails to disclose method for selectively filtering packets in a data communication switch backplane comprising for each packet, on each receive interface,

Art Unit: 2665

determining if the packet's destination address is a recognized forwarding address; for each packet, on each receive interface on which the packet's destination address is recognized, transmitting a claim signal to other receive interfaces on one of a plurality of claim lines reserved for the packet bus on which the packet was received; for each packet, on each receive interface on which the packet's destination address is not recognized, determining whether a claim signal has been received from another receive interface; on each receive interface, capturing the packet for which a destination address is recognized on the receive interface or for which a claim signal has not been received from another receive interface; and on each receive interface, filtering the packets for which a destination address is not recognized on the receive interface and for which a claim signal has been received from another receive interface within a structure of the claim.

As claim 26, the prior arts fails to disclose method for method for preventing congestion in a data communication switch backplane comprising on each transmit interface, propagating packets to a plurality of receive interfaces; on each receive interface, capturing the packets for which forwarding is indicated; for each packet, on each receive interface on which the packet is captured, determining whether there is sufficient room to queue the packet in a forwarding queue; for each packet, on each receive interface on which there is not sufficient room to queue the packet in the forwarding queue, transmitting a stall signal to a transmit interface on a first stall line of a plurality of stall lines reserved for the packet bus on which the packet was received; and on each transmit interface which has received a stall signal, suspending the propagation of additional packets within a structure of the claim.

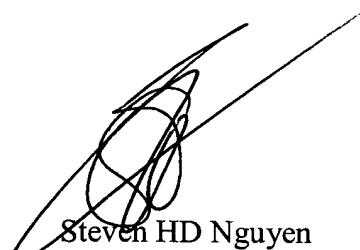
Art Unit: 2665

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven HD Nguyen whose telephone number is (571) 272-3159. The examiner can normally be reached on 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy D Vu can be reached on (571) 272-3155. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Steven HD Nguyen
Primary Examiner
Art Unit 2665
8/18/04